What is claimed is:

1. A method comprising:

receiving a satellite signal spectrum in a receiver; and

determining a local oscillator (LO) frequency for a signal channel within the satellite signal spectrum, the LO frequency being away from a center of a widest signal channel by greater than half of a signal band of the widest signal channel and less than half of a passband width of a baseband filter of the receiver.

2. The method of claim 1, further comprising selecting the LO frequency from a first LO selection region and a second LO selection region, each of which are adjacent to a signal channel.

3. The method of claim 2, further comprising selecting the LO frequency to be outside of the signal band of the signal channel by at least a first amount to avoid 1/f noise and a DC offset effect.

4. The method of claim 1, further comprising determining an error value corresponding to a frequency error of a LO generating the LO frequency.

5. The method of claim 4, further comprising storing the error value in a storage medium.

6. The method of claim 1, wherein the baseband filter has a smallest passband width that is wider than a width of the widest signal channel and half of a LO-step frequency, wherein the receiver comprises one tuner.

7. The method of claim 1, further comprising:

mixing the satellite signal spectrum with the LO frequency to obtain a downmixed signal; and

filtering the downmixed signal using the baseband filter.

8. The method of claim 7, further comprising selecting the LO frequency to cause a center frequency of the downmixed signal to be at a center of a passband of the baseband filter.

9. The method of claim 1, further comprising determining a new LO frequency for a new signal channel within the satellite signal spectrum, the new LO frequency being outside of a signal band of the new signal channel and an offset region surrounding the new signal channel.

10. The method of claim 9, further comprising selecting the new LO frequency so that it does not interfere with one or more existing LO frequencies.

11. The method of claim 10, further comprising selecting the new LO frequency from a LO candidate selection region that is outside a crosstalk region surrounding the one or more existing LO frequencies.

12. The method of claim 11, wherein the LO candidate selection region is outside a crosstalk region surrounding harmonics of the one or more existing LO frequencies.

13. The method of claim 11, further comprising maintaining parameters of existing signal channels when tuning the new signal channel.

14. A receiver comprising:

a first mixer to mix a received signal spectrum with a first local oscillator (LO) frequency to obtain a first downmixed signal;

a first baseband filter to filter the first downmixed signal to obtain a first digital baseband signal for a first signal channel; and

a storage medium including information regarding a minimum filter bandwidth for the first baseband filter, the

minimum filter bandwidth based upon a widest signal channel for the received signal spectrum and a separation frequency.

15. The receiver of claim 14, further comprising:

a plurality of mixers to each mix the received signal spectrum with one of a plurality of local oscillator (LO) frequencies to obtain a plurality of downmixed signals; and

a plurality of baseband filters to each filter one of the plurality of downmixed signals to obtain digital baseband signals for a plurality of signal channels.

16. The receiver of claim 15, wherein the minimum filter bandwidth is equal for the plurality of baseband filters of the receiver.

17. The receiver of claim 14, wherein the minimum filter bandwidth is determined based on a number of tuners within the receiver.

18. The receiver of claim 14, wherein a LO step frequency of the receiver is based on a number of tuners present in the receiver.

19. The receiver of claim 18, wherein the minimum filter bandwidth is at least equal to the LO step frequency

and a width of the widest signal channel, wherein the receiver comprises two tuners.

20. The receiver of claim 18, wherein the minimum filter bandwidth is at least equal to half of a width of the widest signal channel and a predetermined value multiplied by the LO step frequency, wherein the receiver comprises three tuners.

21. The receiver of claim 18, wherein the minimum filter bandwidth is at least equal to a width of the widest signal channel and a predetermined value multiplied by the LO step frequency, wherein the receiver comprises four or more tuners.

22. The receiver of claim 14, wherein a LO step frequency of the receiver is greater than the separation frequency, wherein the receiver comprises at least four tuners.

23. The receiver of claim 14, wherein a LO step frequency of the receiver is less than the separation frequency, wherein the receiver comprises three or fewer tuners.

24. The receiver of claim 14, wherein the storage medium further includes instructions that if executed enable the receiver to select a new LO frequency that does not interfere with one or more existing LO frequencies.

25. The receiver of claim 24, wherein the storage medium further includes instructions that if executed enable the receiver to select the new LO frequency based on a value of the one or more existing LO frequencies and relative locations of one or more existing signal channels and a new signal channel.

26. An apparatus comprising:

a first tuner to receive a satellite signal spectrum;

a first oscillator to generate a first local oscillator (LO) frequency to be mixed with the satellite signal spectrum to obtain a first signal channel; and

a selection circuit to determine the first LO frequency, wherein the first LO frequency is outside of a signal band of the first signal channel and within a passband width of a first baseband filter of the first tuner.

27. The apparatus of claim 26, further comprising:

a second tuner to receive the satellite signal spectrum; and

a second oscillator to generate a second LO frequency to be mixed with the satellite signal spectrum to obtain a second signal channel.

28. The apparatus of claim 27, wherein the selection circuit is adapted to determine a new LO frequency, wherein the new LO frequency does not interfere with an existing LO frequency.

29. The apparatus of claim 28, wherein the selection circuit determines the new LO frequency based on a crosstalk region of the existing LO frequency and a frequency location of an existing signal channel and a new signal channel.

30. The apparatus of claim 27, further comprising:

a third tuner to receive the satellite signal spectrum; and

a third oscillator to generate a third LO frequency to be mixed with the satellite signal spectrum to obtain a third signal channel.

31. The apparatus of claim 30, wherein the selection circuit is adapted to determine the third LO frequency, wherein the third LO frequency does not interfere with the

first LO frequency or the second LO frequency, wherein the apparatus comprises three tuners.

32. The apparatus of claim 30, wherein the selection circuit is adapted to select one of the first LO frequency or the second LO frequency for use in obtaining the third signal channel from the satellite signal spectrum, wherein the apparatus further comprises a multiplexer.

33. The apparatus of claim 30, further comprising:

a fourth tuner to receive the satellite signal spectrum; and

a fourth oscillator to generate a fourth LO frequency to be mixed with the satellite signal spectrum to obtain a fourth signal channel.

34. The apparatus of claim 33, wherein the selection circuit is adapted to determine the fourth LO frequency, wherein the fourth LO frequency does not interfere with the first LO frequency, the second LO frequency, or the third LO frequency.

35. The apparatus of claim 33, wherein the selection circuit is adapted to select one of the first LO frequency, the second LO frequency, or the third LO frequency for use in obtaining the fourth signal channel from the satellite

signal spectrum, wherein the apparatus further comprises a multiplexer.

36. The apparatus of claim 33, wherein the first tuner, the second tuner, the third tuner, and the fourth tuner are adapted on a single integrated circuit.

37. A method comprising:

determining a smallest passband for at least one baseband filter of a receiver based on a widest received signal channel width and a separation frequency of the receiver.

38. The method of claim 37, wherein the smallest passband of the at least one baseband filter is at least equal to a local oscillator (LO) step frequency and a width of a signal channel, wherein the receiver comprises two tuners and the width of the signal channel is greater than or equal to two times the separation frequency.

39. The method of claim 37, wherein the smallest passband of the at least one baseband filter is at least equal to half of a width of a signal channel and a predetermined value multiplied by a local oscillator (LO) step frequency, wherein the receiver comprises three tuners

and the width of the signal channel is less than two times the separation frequency.

40. The method of claim 37, wherein the smallest passband of the at least one baseband filter is at least equal to a width of a signal channel and a predetermined value multiplied by a local oscillator (LO) step frequency, wherein the receiver comprises at least four tuners.

41. The method of claim 37, further comprising setting a local oscillator (LO) step frequency for the receiver.

42. The method of claim 37, further comprising setting a crosstalk region for the receiver.